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EDUCATION

A MONTHLY MAGAZINE

DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION

FRANK HERBERT PALMER, A. M., EDITOR

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EDUCATION

Devoted to the Science, Art, Philosophy and Literature of Education

VOL. XLIV. FEBRUARY, 1924 No. 6

The Humanities Versus the Utilities

FLORENCE MARY BENNETT, WALLA WALLA, WASHINGTON.

THE comfort of a text is undeniable. A subject may prove disconcertingly hampering to a writer, who finds himself rigidly and inexorably bound by its barriers, whereas a text is but a friendly guide-post which points the way to a desired goal attainable by pleasant journeying, whether on the straight road or by delightful vagaries therefrom. Indeed, however plainly one may have spelled out the name on the sign-board, doing so scarcely compels one to follow the highway further than a few steps. And there is comfort in unbounded moorland spaces and in natural coppices and green woods, as every pedestrian knows.

At times a dictionary definition will serve for a text almost as well as a verse from the Bible. A simple blossom of thought may be culled from the rather formidable nosegay offered, just as a single phrase, deliciously defiant of context, has often given the preacher suggestion for a master homily. Was not the chief relish to the old-fashioned sermon—so far as the congregation was concerned—the half-maliciously curious thought: What will he *make out of his text?* Reading the dictionary is perhaps not universally considered either an elegant or an intellectual pursuit. The myth is current that a certain famous college for women, Minerva's veriest haunt, banishes dictionaries of the English language from the reading-room of its handsome library,

the assumption being that the correct scholastic maiden will consult such a tome, as the Cranford rulers sucked their oranges, in privacy. Nevertheless, it is open to argument whether a bout of dictionary reading is not stimulating. It may be conjectured that after a season of feverish dryness the intellectual glands may, by the incitement of a series of rapidly impinging disparate ideas, be induced to secrete in comfortable abundance their precious fluid. The sceptic has opportunity to convince himself that one does not progress far at a sitting with a lexicographer before he is enmeshed in astonishments and fancies as he dizzily perceives the devious entertainment of words.

Suppose, casting about among matters much battered by present-day discussion, one were to choose for meditation "The Humanities." Rephrasing, with transfer from the Latin to the Saxon mould, would give "The Mankindlinesses," but this scarcely makes a break from the classical tradition implied in the more familiar learned word, for, rather impishly, the suggestion that comes is of Terence's well-worn *nihil alienum:*—"Man am I: of that which touches man, nothing do I consider foreign to myself." The Latin is more compact and more concrete than the English. Now the *humanum,* that which touches man, the human—the *mannish,* if one will conceive the Saxon adjective to be broadly generic!—Terence was not confusing with *humanitas.* And yet indubitably he, as well as a later humorist of different speech, George Meredith, must have held that a person in a high state of *humanitas* is not for that reason estranged from the *humanum.* Here is the lie given to certain theories of art which exclude all developments of *humanitas* from their purview.

Odd that the Latin word *humanitas* swings us into the field of the abstractly intellectual, while the English derivative from a Greek synonym, *anthropology,* keeps us concerned quite practically with the corporeal human, even with his skeleton and its sepulchre, his pots and his pans and his weapons! And yet, after all, the great merit, the enduring

appeal, the innate charm, of Greek poetry and art may be found in the very fact that the roots are firmly fixed in the homely soil, the dust out of which man was created. The Titans were truly sons of earth. Prometheus-like, Greece has been the guide, holding fast the *narthex* in which the celestial fire was stolen, succumbing to ignominious torture, contemplating the promise of a God-sent deliverer—a brawny, toil-worn one!—comforted by the delicate spirits of the cosmos. The *urbane* and the *academic,* these things are gloriously absent from Greek art and letters. Likewise the grandeur of English literature is in inverse ratio to their presence therein. But the valuable service performed by the Roman spirit of *urbanity* and *academicism* in civilizing our uncouth ancestors of northern Europe is not to be minimized by a single iota. The pure wine of Greek thought was too heady for barbarism, quite as much as was the pure nectar of Christianity. Therefore the spirit which formed ecclesiasticism—the spirit of Roman culture struggling to cope with the vast disintegrating forces of the savage north—organized learning as well as religion, compounding and administering the draught by due prescription.

At any rate, Rome passed on wine, and new wine, prudently bottled in new flasks. Just here, indeed, is the fascination of mediaevalism to a mind like that of William Morris—an oddly blended thing, but a quaint and daring innovation. Who can gainsay that the mode of thought which gave Europe its cathedrals possessed an elixir of creative power?

Likewise who can deny the quality of lofty imaginative appeal in present-day Science? Telegraph, telephone, wireless, X-ray, radium—these are essentially modern, abundantly commercialized inventions of man, servants of man; also they are symbols of the spirit of research, that which marks off our "day" as distinct. About the devoted laboratory worker, incredibly patient, sublimely diligent, there is the savour of the religious ascetic. If one be in a mood of weariness with the world's mechanical perfection of the art of living, in the state of mind when a telephoneless house

resembles elysium and an automobileless, out-of-date, little village, the celestial city, it were well to talk with a Pure Scientist. He will by a mere tone of voice relegate the clever inventor to the limbo of the negligible. Indeed, the soul of the Pure Scientist is in more harmonious accord with that of a Professor of Classical Philology—save the mark!—than with that of the dexterous engineer who swings bridges across impassable gulfs, digs canals in spots intractable, gives the finishing touch to the wonder-working turbine, evolves the gunpowder-excelling mixture which shall blow up navies, and the serum which shall cure a preying disease.

The Professor of Science in one of our colleges is admirable, whether as subject or object, and Socrates would have hugely relished his companionship. His heart's allegiance, determined far more by temperament than by training, will be either in the camp of the Pure Scientists or in that of the practitioners of discovery, and the seats in his class-room will be filled in a ratio delicately adjusted to this allegiance. The man enamoured of the abstract, whether in science, mathematics, or literature, does not lecture to a crowded room.

Science is one of the most interesting of words—as is *mathematics*—overwhelming in the demands which its original significance makes on a professor! He who occupies a chair of learning thus denominated has a lofty vocation, often accomplished in a manner which, as has been hinted, would have enraptured Socrates. After a discourse delivered in an amphitheatral lecture-hall of goodly dimensions to a numerous following of pupils—male and female, the American brand, devotees of popular course—the Professor may be pictured as facing, with varying and acute emotions, the goggle-eyed Athenian martyr. "What is Biology?" So might the first innocent question run. Or, "What is the Scientific Method?"

Ah, yes! But how escape being a sophist if one be a professor? No man endowed with a spark of divine fire ever sat behind a desk without the humiliating realization,

painfully vivid to his inner consciousness at times, of himself as an ignoramus, a bully, a pretender. The power of ruling out all queries except those to which one has a pat answer is a dreadful power. Now and then a sharp knife of inquiry from the benches slashes mercilessly, although of random aim, and there are occasions when a true-hearted professor eats his words, wholesome penitential fare. But, on the whole, his soul is exposed to a danger as deadly as is the intellectual peril to which his mind is open.

It is not to be forgotten that souls have also perished in the ranks of the Humanitarians. This, indeed, is a charted peril, for a wraith is said to loom in the pathway of the prospective student of Greek, bidding him beware of the dead bones that gleam in the sepulchres of philology. "No bore," says the spectral voice, "like the man who loves linguistic roots and accidence!" This is an accepted tradition. The man who specializes in the gall-duct, or the earth-worm, or the hairy-legged spider, or fungi, may raise a smile, but it is the grimace of forbearing affection. Alas! the weary old controversy! Alas, that the defenders of the older Learning do not assert that their labour is of love, instead of consuming their very hearts in the effort to prove "the value of the Classics."

The case is astoundingly simple, so far as the ancient languages are concerned. There was the time when the modern literatures of Europe were on trial. Men—masters of the pen—apologized for writing in their mother speech. Small wonder that the new-born giants strove to shoulder their older brethren out of the way! Ancestors of such marvelous longevity as Latin and Greek naturally bulked with unwelcome magnitude to the vision of the youthful heirs, eager to prove themselves—French and Italian and Spanish and English. How aggravating the wagging of the hoary beards! —"These young ones have nothing really meaty for man's hunger!" And so the older ones came by a series of falls. Aye! but here is a mystery! If they fell in the wrestling-bout, each time that their frames touched mother-earth they

gained in strength and beauty and youth. Behold there is now none old in all the company!

The pit-fall for the present generation lies in the application of the doctrine of utility to all studies. Only the languages freely used in commerce are to be taught, and of these a chatterer's knowledge is all that is demanded. Applied sciences, household arts, the chemistry of cooking, such things are the intellect-sharpeners of the moment,—as secretarial positions, replete with possibilities of perfection in method and detail, also with promises of world-tours of inspection, are the grand after-college prizes. PREPARATION FOR LIFE is the clarion cry. PREPARATION FOR MAKING A LIVING, this is the interpretation. The case is typical of the young married woman who deplored her college training in the humanities and her subsequent years as a teacher of Latin because, by thus neglecting practical chemistry, she had not learned how to separate two table-glasses which she found too closely wedded in the hot water of her dish-pan. Earning a living is, indeed, a grand and glorious incentive and responsible for a large proportion of the achievements of earth. Human nature would have sadly run to seed without the specific curse meted out to Adam and his sons. But earning a living is not the end of life. 'Get rich and enjoy your money." Here is the philosophy of the day and who should cavil at it, sound doctrine that it is, especially in contrast to that other injunction. "Get rich to be rich!"

No! Enjoy your money, as well as the fruit of all the other opportunities that life has given you. Here is the *crux,* indeed. To understand the ennobling use of leisure, this is the touchstone of civilization.

There are numerous good people who are genuinely afraid of culture for themselves and their children, as something effeminate, disintegrating to character. To dedicate time to cultivate the intellect, they conceive to be a peculiarly wicked form of spiritual selfishness. A potato-field, a wheat-farm, a chicken-yard, a rose garden or a tulip bed—these may be safely cultivated. But to spend hour after hour in study,

with nothing to show for it, this is dangerous. The point of view is popularly maintained in religion likewise. The man who merely goes to church with regularity, perhaps also having some private devotional practices, more or less formal, is speciously dubbed a *bench-warmer.* The important part in religion today is active participation in church sociables, boys' and girls' clubs, guilds and societies. Formerly pupils streamed forth from the colleges to man the schools of the nation. Now they are to be stokers, if they may not be drivers, of the engines for doing good.

A course in a school where serving in various departments of a mammoth city department store is a pre-requisite to graduation is conceived to fit a young woman to be a Dean of Women in some school or college far better than experience as a teacher of a conservatively "accredited" subject. One is supposed by the former method to learn how "to deal with girls."

How to *deal* with minds—there is room to fear that this problem is being neglected. In fact, not only among students who scoff at the *dig* or the *grind* or the *shark* is there academic scorn of intellectual ambition. Some of those who sit in the august Chairs counsel a good time moderately interspersed with studying. Worst of all is the lack of study among the "grown-ups," whether they be college graduates or not, who are employed in the sober tasks of living. Nothing in this world is more restful to a person jaded with the diverse and crowding cares of the day than to take methodically a little space of time for serious reading or study—the subject chosen mattering not at all, so long as it be congenial and sufficiently difficult to engross the powers of the mind. Minds deteriorate with dreadful rapidity by lack of use. It is a grim truth, as inexorable as any other natural law. The pity of it, how we fail to use in adult years the tools which presumably school or college fitted to our grasp! The boy who "majored" in Physics or Chemistry becomes in later life so immersed in his gainful occupation that he fails to keep abreast, in any real sense, of scientific progress. He

has no leisure for a genuine treatise on his formerly beloved subject, although he may skim some of the popular or semi-scientific articles current thereanent. And again, how little those foreign tongues, the modern "practical" ones, diligently acquired in college, are read or spoken extramurally! We are prone to believe that to do any variety of studying we must have a tutor. "Ah," says the young matron, "I really think that I should take piano lessons. I should dearly love to resume my music." All that she needs is sufficient determination to resume the "practicing" of her girlhood. But, almost infallibly, the piano, kept for form's sake or to aid the children on their appointed musical way, will reproachfully stare her in the face to the end of her days.

We are told that in music, as well as in regular schooling the little people now are accomplishing far more than the generation before them, because "it is all made so interesting." At any rate, probably thanks to the enlivening nature of the pursuit of learning, academic and intellectual, youth today is deliciously unabashed! One wonders whether men and women ever did really believe in hard work, whether it is a sprightly myth that laboring-men once rejoiced in a well-executed task, whether anybody of tender years was ever told that the multiplication table is hard and that to conquer it is a prime joy, that a good education is acquired more or less painfully, but is a priceless possession! The air buzzes with chatter about ART, spelled in capital letters, the chirruping of the pygmy "creators" rhapsodic over their own "creations" and those of their friends and their friends' wives. But the habit of hour after hour work at a chosen task is not in vogue. However, the law abides, that the substantial rewards go to the earnest laborer. And this were a fitting sentence to inscribe above the gate-ways to our public schools.

And yet, after all, it is rather absurd to be impatient with a generation or so in the throes of re-adjustment—albeit there will always be social throes until the millenium has fully dawned, and the very process of living involves innu-

merable readjustments. The "discovery" of philanthropy, trade-unions, child-welfare, religious toleration, electricity, the atomic theory, relativity, and the various other improvements more or less novel has been and is a thrill-generator. Public education must perforce be the hunting-ground, if not the laboratory, of the specialist, the inventor, the crank. We live, as will appear objectively five hundred years hence, in the days when European feudalism is breathing its last. Many find it fascinating to watch in the pages of history the battle fought and won by the English commons against royal prerogative. The Mayflower has made countless dazzling voyages this last year across the Atlantic, with our civilization snugly on board, and we have swollen with pride at the memory of our "yeomen" ancestors. It was not long ago that we were galvanized as a nation into warlike action by the cry that we were fighting Democracy's battle. But what a Calibanesque thing this Democracy may sometimes appear at close range! When the "people" fully control the school curriculum, will the "people's" children get really the best mental pabulum? One discerns pathetic wistfulness often. Carpenters are not always in favour of manual training as a required portion of their sons' schooling, although the chances are that they will shy rather awkwardly at Greek. There is much bustle, much speaking in this modern life, there are aggravating "throw-backs" into feudalism on the part of rich snobs, there are innumerable things to learn and these are, one and all, begirt with voices shouting the praises of this or that favourite. Small wonder that the luggage brought by the centuries is in peril of being cast away!

The fancy presents itself that many of our soldier-lads found themselves in France with pitiably little mental luggage, when the time for observation came, after the dreadful period of carnage. Presumably the over-crowding of the colleges is to be attributed, as it popularly is, to the sudden recognition on the part of these young men of the value of an education. Of course, they must individually have counted the value in various kinds of coinage. Some had seen that

the college man got a better place in the army machine because of his academic stamp, others that the college man truly showed greater capacity for service than his untrained compatriot. But many a boy must have felt pathetically that he was the ignorant spectator at the pageant of history. And yet, cruelly, he had been thrust by fate to play a tragic part in the recently enacted bloody scene. What did these *châteaux*, these art galleries, these cathedrals and palaces, these alien customs, manners, speech, and laws mean? All persons of an imaginative susceptibility must have had the experience, which is evoked possibly by a line of poetry or noble prose, by a glimpse of some peculiarly satisfying bit of natural beauty, by a statue or picture, more often perhaps by a certain musical strain, wherein a grand flashing vision comes of some momentous and picturesque event of the past: the march of the Roman eagles across the Alps into the barbarian regions of the west; the wanderings of the motley Germanic tribes under whose flood-tide Rome perished; the Norse Vikings thrusting their pirate ships into the waters of France; a festival in a lovely Italian garden of the Renaissance; primitive men moving on their hunting expeditions, stone weapon in hand, by the tropical rivers of western Europe; Luther before the Emperor's diet; the gaudy and innumerable Persian army trailing its way toward the Pass at Thermopylae. And the realization comes with electrifying force: It all actually happened; human eyes witnessed these things; they belong to the story of *my* civilization.

Picture a youth, of really fine intellectual potentiality, cut off from this orderly knowledge of the past, without the arts and literature! There must be numbers of these latent tragedies of the mind. Suppose our new *curricula* should little by little bury the memorials of our past deep in oblivion, as the shifting sands piled themselves slowly, layer upon layer, on Egypt, Babylon, Troy, Sparta, Imperial Rome—well, there will be left the joys of automobiling, yachting, card-playing, aviation, and money-making, also the æsthetic

stimuli of the moving-picture, the dance-hall, and the newest dissonances in art and music. But alas for the spirit of man!

The old system of learning was painstakingly built up out of the desire to equip the scholar with knowledge of the world in which he lived and with wisdom to enjoy and disseminate the gifts of his intellectual treasury. The HUMANITIES were devised and labelled as the scholastic discipline for a man of "gentle" blood. Science, the newcomer among the HUMANITIES required for a time rather too much elbow-room, but she is now quite well accommodated to her mates. For who should fail to understand that there is no material quarrel between the backward-looking and the forward-looking scholar, *i. e.* between classicists and scientists? Indeed, the latter sometimes cast the most penetrating backward glance of all, as when they compute the age of mankind and of the earth and analyze the composition of the stars, while the former sometimes are endowed by the nature of their meditations, sprung of some page written very long ago, with astonishing clairvoyance of the future. Indeed, in pure learning there should be neither backward nor forward. Eyes should look always truth-ward. Verily Einstein does but confirm the ancient philosophical tenet, that truth is absolute and eternal. The theory of our Democracy in freely opening the advantages of education is that it is incumbent on us all to prove by that which we make of ourselves that we are *gentle-folk*. Surely then our children may demand the *gentle* nurture of the HUMANITIES.

The dangers that beset the *gently* educated man are obvious: that he see too clearly both sides of a burning question, whence, often with the semblance of cowardice, he may hold his opinion in equilibrium; that he may develop a sense of superiority; that he tend to rest on other people's labour of thought; that his enthusiasms become deadened, this being consequent on discrimination between sentimentality and sentiment. The distinction between Knowledge and Wisdom is of great antiquity, well-expressed in the literature of many

nations. Education or culture that grows of wisdom has none of the blemishes indicated. It springs as liberally and is as humble as pure religion.

Robert Louis Stevenson, in his *Memoir of Fleeming Jenkin,* has, among the brilliant quotations that he records from the famous scientist and engineer whose biography he is writing, this, that shows refreshingly the compatibility between the pursuit of scientific investigation and the love of literature: " 'Yesterday I had some charming electrical experiments. What shall I compare them to—a new song? a Greek play?' "—and this, which pleads the cause of the HUMANITIES: " 'No man need die for the water a poet can give, and all can drink it to the end of time and the pool never dry—and the thirst and the water are both blessed.' " More ancient words than these speak with impressive grandeur of that ideal Thing on which all theories of education should be founded. They are those of the writer of that profoundly beautiful book of the *Apocrypha, Ecclesiasticus.* Herein WISDOM speaks thus: "I dwelt in high places and my throne is in a cloudy pillar. I alone compassed the circuit of heaven and walked in the bottom of the deep. In the waves of the sea, and in all the earth, and in every people and nation, I got a possession. With all these I sought rest: and in whose inheritance shall I abide? . . . The Creator created me from the beginning of the world, and I shall never fail. . . I am the mother of fair love, and fear, and knowledge, and holy hope. I therefore, being eternal, am given to all my children who are named of Him. Come unto me, all ye that be desirous of me, and fill yourselves with my fruits. . . *They that eat me shall yet be hungry, and they that drink me shall yet be thirsty. . . The first man knew me not perfectly: no more shall the last find me out.* For my thoughts are more than the sea, and my counsels profounder than the great deep. I also came out as a brook from a river, and as a conduit into a garden. I said, I will water my best garden, and will abundantly water my garden bed: and, lo, my brook became a river, and my river became a sea."

The Selective University

ROBERT VAN VLECK ANDERSON.*

BY common acceptance a university is an "institution of higher learning," and the characterization satisfies us as giving the essence of a definition. It is an educational institution, *par excellence*. Guided as our thoughts are by convenient, time-honored phrases and mental formulæ, we are not apt to think how far this conception fails of the full truth, and of the full potentiality of the corporate body that has grown up around the primitive association of master, log and student. Universities are in fact dwarfed by this idea, for it is not merely a definition but exerts as it were a hypnotic influence urging their organization and restriction in conformity with a stunted concept. In the old days the term university meant any corporate body, not merely one devoted to learning and teaching, but the word came gradually to be narrowed to the latter sense as it replaced the old term *studium*. The original meaning is suggestive of the broader concept that should attach to the modern and future university.

An institution that selects a group of investigators and teachers on the one hand and a group of young people on the other, which virtually rears the latter in close association during their maturing period, and which chooses and cherishes a large family of alumni, is perhaps not chiefly an instrument of education. But universities have in a measure failed to visualize their other functions, and have fallen short of realizing opportunities inherent in them, especially in the

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primary function of selection. Such fulfillment as has been achieved of opportunities other than education has been largely a bi-product, the natural consequence of running "educational plants." The results would be eminently enhanced in value if always given conscious guidance.

The service that universities perform in uncovering native ability and starting chosen individuals on the way to many of the responsible places in society is on a par in importance with its educational service. The roots of the process go back to the schools, since it is obvious that there is a progressive tendency for those less alert mentally to drop by the wayside, and, on the average, for the brighter and more aspiring to reach the higher rungs of the educational ladder. Besides the training imparted there is this constant selective process, the benefits of which to society few will deny. The question arises, however, whether measures based on broader foundations and more refined methods would not be advantageous to a larger degree. Commonplace as is the idea of selection, of finding "picked men," of distinguishing the fit from the less fit, it is strange how little thought society has given to the haphazard and wasteful methods employed. The universities, not only as leaders of thought but also as specially favored instruments of selection, have the duty as well as unusual opportunity of consciously exercising their selective and directive functions in a broader and more effective way.

It is the "select" element of society that is relied upon chiefly for leadership, for the guiding work of the world. This is a fact becoming more and more appreciated, and with it must go greater concern that the "select" should really be the superior in the best and broadest sense. Of the many factors silently at work winnowing from the mass those who shall hold leading positions, the university is of course only one, but it is among the most powerful and will surely become more so. With the increasing complexity of knowledge and of civilization, the preliminary of a university course and

recommendation will become more and more a requisite and a stepping stone to a successful career; and a cumulative responsibility is thereby placed upon these institutions. Equalling in importance the education given comes the responsibility of choosing who shall be their members and who shall bear their insignia. The university's task in this respect is broadly threefold: to go out and seek individuals of superior endowment and thus prevent the wastage of gifts by reason of some such individuals failing to receive the opportunity that a university course implies; to choose carefully those upon whom its efforts may best be spent; and finally, not only to select those fitted to bear its recommendations and degrees, but to become acquainted with its members, to differentiate them on the basis of special qualifications, and to assist them to positions in the world where their aptitudes will be of most avail. In each of these respects universities are falling far short of their possibilities. The present article deals mainly with the second one, the question of choosing for university attendance.

In the present stage of thought on the subject, one may say, blessed is the university with restricted facilities for attendance! It can pick its men and women! Although many institutions have been flooded with more students than they could properly deal with, the opportunity inherent in limitation has been largely a wasted asset. Such as have had to limit numbers have resorted principally to time-serving and unimaginative ways of doing so. Priority of application, blood relationship to former students, religious persuasion, financial or social eligibility have been the principal criteria employed. Occasionally an institution has partially glimpsed its opportunity and raised certain requirements. But the very word "requirements" conveys a picture that shows how limited the vision has been. The picture is one of examinations, of marks in certain "subjects," and lists of required books and courses. The word connotes little of humanity, of all that is meant by personality. More than one

institution accepts its entrants on the basis of chronological order in a waiting list where names must be entered long before, as if there were a moral obligation always implicit in the formula "first come first served." The state-supported universities are perhaps handicapped in being under some necessity in the present stage of public opinion to take all comers who are scholastically prepared. But here the field of the independent university broadens out. At least one such university—Stanford—with necessary restriction of enrolment, is laying stress on general ability and qualities of leadership as desiderata on the part of entrants. It is a significant advance. Much earlier, the Rhodes foundation embodied the shrewd requirement of athletic ability and favorable individuality.

Is it not desirable to go to the heart of the matter and to develop the truly *selective university,* which will strictly limit enrolment on the basis of a well-proportioned combination of fundamental qualities? There is a strong conservative bias even yet to the side of mere scholasticism and the ability to pass examinations in certain time-honored compartments of knowledge. With the rise of science of mental testing there is the assurance of gauging mentality more broadly and at least with a greater approximation to the truth than by the old impressionistic methods. But mental agility alone may be a weak reed, and here again the tendency is to put too great emphasis upon that by itself, as if it were something quite apart from health, will, judgment and other factors that combine to make the individual. Any wise estimate of one must be in its relation to the others and their interplay. If our university of the highest grade is to be a select association of the best that it can draw, let the basis for admission be a comprehensive one, let its candidates be judged as individuals, as "men of parts" not merely of one part, let each represent a well-balanced union of superior physical and mental heritage. It may seem heartless or unfortunate to enforce a rigid policy of exclusion, especially in the case of

individuals of marked ability who do not meet the test of physical stamina. But it can hardly be thought more invidious to exclude on grounds of health or other factors than as at present on the basis of insufficient intelligence, and there will always be other institutions to provide that education is denied to none. If the selective university lose occasional individuals who achieve great things in spite of handicaps, it will nevertheless gain in the long run by concentrating on those least handicapped; by setting itself the aim of being represented solely by members whose special talents are backed not only by the disposition to put them to good use but by more than average soundness of constitution. The more the selective function is exercised as an essential corollary to education the more diverse will universities become, each setting the standards that it wishes its name to represent or that it can attain. With their growing responsibilities to society such diversity is desirable. Thus also the ground will be laid for the principle of selection to work not only through each university but as between the various institutions.

The university that establishes high standards of harmonious physical and mental endowment, as well as of training, will gain notably in prestige. It will thus assist its own policy by attracting the best to its doors and enlarging the field from which it can select. It is bound to draw the ambitious and the capable both to its faculty and student body. It will make its degree not only a symbol but a distinction. Its body of alumni will include an unusual proportion of outstanding and successful individuals. If on no other ground than that it will thus gain the notice, friendship and financial support of an unusual group, the idea should have a strong appeal to more than one president and board.

The requirements of the selective university will afford an attractive field for discussion and investigation during many years to come, and a rich harvest of experience will be gathered from the various systems that are likely to be intro-

duced. But it would seem that the fundamental qualifications to be sought by the institution which adopts the ideal of all-around manhood and womanhood are superior physical constitution, ability and character, judging these primarily in the light of inherent, hereditary qualities, although with regard at the same time to advantages gained through previous influence and training. The first fundamental is not merely—nor even necessarily—a temporary state of health, but rather a sound physical background, the foundation that presages a long and active life. The second is the intelligence and capacity that permit one to think and do things well. The third may be considered to comprise those qualities of good humor, initiative, will, aspiration, honor, and others which predispose to the helpful employment of one's faculties. The combination of these gifts predetermines in the great majority of cases a life of more than ordinary success and usefulness. However far from perfect present methods of judging and rating such qualifications may be, "common sense" is better than nothing, and that, at least, is worth trying. It would not require elaborate machinery, nor necessarily involve departures into debatable fields of psychologic testing, to achieve a high average of all-round excellence, and I venture to say a higher average than prevails in any university of the present day.

In addition to the best methods now in practice for judging talent and mental—not merely scholastic—qualification, it would be necessary to subject candidates to complete physical tests along well-known lines; to learn the main features of their family history, with special reference to hereditary vitality, ailments, and abilities; to obtain data regarding their childhood and school record; and finally, to have them come into personal contact with a number of men and women of superior ability and experience in judging personality, bent and other traits of character. A university could hardly go far wrong in accepting individuals who met high standards in all these respects. There would doubtless be mis-

takes, both of inclusion and exclusion, but only the former would positively affect the average; and it may be observed that a further selection along similar lines, after more thorough investigation, would properly precede the granting of degrees.

To be sure, the rating of candidates for entrance and graduation on the basis of a composite test such as the above would require more attention to the problem of personnel than is customary today, with a somewhat enlarged and more highly specialized staff. But greater care as to personnel is urgently needed. The universities have many students who might better not be there, and many more who through some inferiority of body, mind or character are not so well fitted to benefit as others who never go. Such students lower standards, and take up more than their due proportion of time and energy. This effort the first-rate university might better spend on others. The advantages accruing to a university having to deal with a uniformly superior element can hardly be exaggerated. Elimination of the mediocre would among other things save considerable resources that could be applied on this very problem of personnel; but even if this saving did not suffice, or if means were not forthcoming otherwise to support the necessary organization, far better might the institution give up one of its conventional departments, duplicated at innumerable other places, rather than fail to know its children. It is more than likely, however, that means would be forthcoming in ample measure to the institution that showed vision and courage in such a significant reform. By the same token, we need not stop with the comparatively simple measures for rating candidates alluded to above simply because more elaborate machinery would be required for a thoroughgoing test and investigation. In particular, a trained staff engaged in research on questions of the heredity of candidates would furnish guidance of superlative importance both for the choosing and treatment of students, and their records would yield compound interest as

the years went by. However much the objectors to all innovations rave, the old-fashioned system of examination is not the last word in testing the ability and development of men and women. The field is broad for the application and improvement of wise methods by which trends of constitution, mind and character can be estimated and forecast.

With respect to the question of health and constitution, it is true that physical examinations are very generally given by universities to their matriculates; but almost entirely with a view to hygiene and to helping the individual, rather than as a basis for refusal, occasionally a candidate is excluded because of physical disability to stand the work or because of disease that is a danger to the community. Such is especially the case where students are housed in dormitories and freedom from communicable disease is essential. With little more organization and effort than is now applied these physical examinations could be made to cover the broader function of selecting individuals of superior physical endowment; those least inclined in the light of heredity and constitution, as well as in the light of acquired tendencies, to suffer troubles that would impair their life and work. Under the degenerative tendencies of civilization we need to lay special stress upon this side, for in reverencing intellect as patrician we are too apt to think of robustness as a plebeian attribute. Sufficient thought is not given to the fact that intellectual superiority and the strain entailed in its full fruition deserves a more than average physical foundation. University communities are undoubtedly in certain important respects picked groups, but it is an interesting problem to what extent good constitution is a factor in the selection. Doubtless mental alertness, the desire for education and the ability to achieve it go more often with good health than otherwise, but there are also potent factors working the other way. Large numbers seek education as a means of avoiding physically active careers; some go to universities to tide over periods of relative disability for other pursuits; some because it is

conventional and they do not know what else to do. Students and poor physique have been associated ideas from time immemorial. At any rate, it is open to grave doubt whether the grade of physical fitness among students is on a par with the average mental grade, compared with the same features as present in mankind at large. However praiseworthy it is to provide education for all who seek it, it is equally an ideal that some institutions at least should establish a high standard of inherent bodily fitness.

No further reasons need to be invoked to justify the establishment of a selective system based on a composite test of essential factors of excellence. Not to repeat other reasons, it is enough that the forward-looking institution will wish to apply its exceptional facilities upon individuals best fitted from all points of view to benefit thereby and to translate its efforts into useful terms of life. But there is another great mission which universities will thereby perform—probably the greatest of all—which adds compelling force to the reasons already stated if we have a far-sighted vision of making the university in highest degree a factor in the progress of mankind.

Universities are today in increasing measure, and on a scale of untold significance, agencies not only of selection but of bringing together men and women so selected. In the United States alone the attendance at such institutions has recently risen to over half a million, and there is a constant flow of youth in and out of their doors. It is bound to be the case that young people drawn together by association, and by community of thought and tastes, as a result of attendance at universities, are more apt to marry within than outside this circle. The selective process of which universities are agents is thus converted into a eugenic process. There is being projected into the future a social group inevitably moulded in the image of the traits which are the factors qualifying for university attendance. Such being the case, it behooves these institutions to think twice what qualities

they are helping to stamp upon this large and exceptionally important human group. For the stamping goes on whether it is conscious or not, and it were far better that it be guided along constructive lines. It is a fairly accepted principle of heredity that traits common to both parents tend to be emphasized in the make-up of the offspring. Even if this were not true, but all the more if it is, there is evident danger that selection for university attendance on a one-sided basis as at present will lead to the development of a poorly balanced group, chosen for certain qualities of mind but not prone to hold its own in the biologic race. In fact, in this way as well as others, universities are already, in common with other agencies of civilization, factors in the racial wastage of most precious human assets. This does not mean that universities are working entirely in that direction; but it does mean that they will fail in their highest obligation if they do not consciously offset such tendencies by laying stress upon symmetrical endowment, and particularly the essential basis of physical endowment, as well as the ideal of superior gifts being in trust for an improved posterity.

Some say that we do not know enough of the complex details of heredity to put into effect a system of eugenics. That is probably true of a mechanistic, detailed system, short of which many have failed to see how eugenics can be applied. But the fanciful concept of such a system has served chiefly to create prejudice against the ideal of race improvement. It is a pity that eugenics should connote in any one's mind a system of imposing a choice of mates or of substituting something else for love and natural inclination. Two observations, commonplace as they may sound, afford the key to a rational and natural application of eugenics—that love and choice usually strike within the circle of one's acquaintance rather than outside, and that they are powerfully aided by admiration for recognized superiority. A university in designating individuals as having superior all-round constitution, and in creating a large circle of acquaintance and mu-

tual interest among young people so endowed, is laying the essential foundations. There can be little doubt that, on the average, happier marriages and better endowed children result from the union of persons both of whom are physically and otherwise above the average. We do not need to await centuries of research on genetics before cultivating this most fruitful field for human betterment, by creating, through education and the association of selected individuals, an environment in which the proportion of such unions will be automatically increased.

Than this duty of wise selection combined with education no function in society could be of greater present or ultimate importance. The universities cannot fail of its performance, designed as they are better than any other existing institutions for its fulfilment. The universities that improve their selective opportunity will do so not only without interfering with other work but with distinct advantage to their splendid service of education and research, and to their influence on human culture in its most prophetic sense.

Song

Each song bears a secret
Wrapped in mystery's gleam,
Eternity's image,
Born of a poet's dream.

Every song holds a spell
God-like power can sow,
Mystic cadence of tone
Caught in ecstasy's glow.

Every song seals a charm,
Bringing joy, healing grief,
With a message of Truth
Bound in Beauty's full sheaf.

Each true song has a soul,
A rare spirit of its own,
Like breath of God's blossoms
By His winds gently blown.

—Frederick Herbert Adler.

The Real South Africa

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SINCE my return from five years in South Africa, I have been asked so many queer questions about that country by well informed, intelligent American teachers, that I have wondered how they got their misconceptions. A recent occasion to look through text-books and reference works on geography has shown me some of the sources of the errors. In the hope that the readers of this magazine may welcome some first-hand information about the little-known newest of the Dominions, I offer this article.

We use the term "South Africa," both in this country and in the land itself, in two senses. One sense is that of the whole "subcontinent,"—either the region from the Congo River to the Cape of Good Hope, or from the Zambezi River to the Cape. The latter use is more justifiable, since the true Central African forests and conditions of life appear north of the Zambezi. For the Zambezi-to-Cape territory I shall use in this article the term "subcontinent," which is the South African term for this whole territory.

The other use of the term, and the one most common, is for the Union of South Africa, which includes the four provinces called Cape Province, Natal, Orange Free State, and Transvaal. The first and third of these were known as "Cape Colony" and "Orange River Colony" before 1910; but the name of one has been altered, and the older name of the other restored. The Union of South Africa also includes, since 1919, the Southwest Protectorate, formerly German Southwest Africa, and now administered directly by the government of the Union of South Africa, under mandate embodied in the Treaty of Versailles. I shall speak of this whole area,

including the Southwest Protectorate, as the "Union," using the term for it that is locally used.

Let us at once get into our heads the idea that the Union is essentially a civilized country. It is not even a backward country. It has cities that compare favorably with those of the United States in many respects. Johannesburg, which is always called Jo'burg, in South Africa, is, with its suburbs, a town of over four hundred thousand population. It has a street-car system that many American cities of like size might envy; a University giving degrees that are recognized as of full value in every English-speaking land; buildings of nine and ten stories, fine telephone service, many asphalt-paved and tarviated streets, and American automobiles in numbers almost as great as in American cities. Its new, two-million-dollar city hall has an auditorium seating two thousand people, and a pipe-organ that equals in quality many of the famous organs in America.

Capetown, again, is a city of a hundred and sixty thousand people, up-to-date in every way. Durban, which does since the World War a port business even larger than Capetown, is a city of a hundred thousand, with a charming beach; as a winter resort it is the Palm Beach of South Africa. Port Elizabeth, with fifty thousand people, is in many ways more like an American city than any other in the country. Pretoria, the capital, perhaps a shade larger, reminds one of the accounts of Washington as it was sixty years ago; but with all modern conveniences, and with a railroad station that is more handsome and convenient than I have seen in any city of equal size in this country. Not only these cities, but every place of over five thousand population, with one exception, in the Union, has electric lights.

Somewhere I have read that the civilization of a country may be gauged justly by the perfection of its transportation. South Africa would rank high on this. Within the Union there are nine thousand miles of railroad. Practically all of this, save a few miles near and through Jo'burg and Cape-

town, and a hundred and twenty miles leading into Durban, is single-track. But the service is good. The passenger service is not so fast as we know in this country, but that is explained easily by heavy grades and a narrow standard gauge. From the coast to the vast plateau that forms the Orange Free State and Transvaal, the trains must climb four thousand feet, or more on some lines, and within an actual climbing-mileage of not over a hundred miles. The gauge is 3 feet 6 inches; but on this narrow gauge are run coal-gondolas holding forty tons of coal and passenger cars as large as our Pullmans of twenty years ago. Their engines are scarcely smaller than those on most of our American railroads.

The passenger service is provided by cars which are a curious combination of the British and American types. On branch lines the older cars, ordinary compartment cars with side doors, after the true British type, are used. But for all the longer journeys the cars look like our older-style ones, and have open platforms. Within the car is a corridor along one side, and opening off this are compartments. Corresponding to our Pullmans are the first-class cars, with four persons carried in a compartment; the seats, running across the car, make up into berths at night; and upper berths, but also set across the cars, lower from above exactly as with our Pullmans. The second-class cars, corresponding to our day-coaches, are similar in general arrangement, but when used for sleeping have a middle as well as an upper berth; six people are thus carried to each compartment. The third-class cars, with plain board seats, are used for negroes, who are segregated in them just as in the negro coaches in our Southern states. The dining-car service is almost identical with what we know here.

But how fast is the service? Durban to Jo'burg, 450 miles, 23 hours; Capetown to Jo'burg, 850 miles, 37 hours; these are about the best speeds made.

Before concluding as to railroads, let it be said here that

there are no navigable rivers whatsoever in the Union. The only water-borne traffic is coastwise, between the ports of Durban, East London, Port Elizabeth, and Capetown. The most important line in the country, as judged by the traffic it carries, is that between Durban and Jo'burg. About two hundred miles from Durban it crosses extensive coal fields; there is much mining here. This coal traffic has led to the growth of Durban in thirty years from a small town to the busiest port in the Union; it has led to a double-tracking of the railroad, completed now from Durban to within fifty miles of the coalfields, and to the bulk of the freight to and from Jo'burg going over this line. Thus it is not the historically significant line from Kimberly north into Rhodesia, called "the Cape to Cairo" everywhere except in South Africa, that is important, but rather the "Natal Main Line." The important railroad from Capetown is the one that goes northeastwards nearly to the Orange River, goes westwards south of it, and then goes north, across the Orange Free State, through Bloemfontein to Jo'burg.

South Africa is, thanks to its good intercommunication and the efforts of the Union government, rapidly becoming united into a real nation.

It is twenty-one years since the "Anglo-Boer" war, which was really the Civil War of South Africa, ended. In 1910 the four colonies were united under one government, and with that they achieved a new position as a nation. For the constitution of the Union of South Africa provided that, after June 1, 1920, the South African parliament might change it in certain features without even the formality of a consent from any authority in Great Britain. The World War was another step in the making of a nation: the South African army, entirely on its own efforts, conquered the adjacent German Southwest Africa, and at the same time put down a rebellion of the "die-hards" who had fought for the lost cause in the Anglo-Boer War. Then a detachment of the South African Army formed the whole of the famous Nyassa-

land Field Force, that prevented for three years the escape to the west of the Germans in German East Africa. The South African Expeditionary Force, in Flanders, was as distinct a unit as the American Expeditionary Force. There came back from these forces some fifty thousand South Africans who had fought for their country,—for South Africa, not for Natal or for the Transvaal, nor even for England.

The Treaty of Versailles marked a third step. In it, thanks to the ability of the late Louis Botha and of Jan Smuts, who succeeded him as Prime Minister of the Union, South Africa was internationally recognized as a nation of sufficiently independent status to sign the Treaty on its own behalf. A fourth step was taken in 1921, when the last remnant of the "die-hards" was decisively beaten at the polls in the general election, and the new nationhood definitely upheld.

But it will be asked: "What about Boer and British? Do they agree now? What language do they speak?"

I answer: the line between Boer and Briton was really only the line between Dutch-speaking and English-speaking South Africans. About two-thirds of the white population of South Africa are South Africans by birth; they speak whichever language happens to dominate in the district where they grow up. For many years in the Cape Province, and since 1910 throughout the Union, the law has been that whichever of the two languages a child does not habitually use as the medium through which he is instructed in school, shall be studied as a subject from the fifth grade onwards. The younger South Africans are nearly all able to use both languages. In fact, one finds some amusing cases. At the Bulwer Park School, Durban, where I taught for a year, the teacher of Dutch was a South African named Louis Thompson. Though of Scotch ancestry, he spoke English with a pronounced Dutch intonation. The teacher of one section of the eighth grade was Anthony P. K. De Wet, a South African of Dutch and Huguenot descent. He spoke perfect English; he spoke Dutch freely also, but seemed to prefer English.

The truth is that the Boer-and-Briton issue is as dead as is Secession in this country.

So it is not without reason that I say that South Africa is not a British Colony, but a nation, governing itself, and bound to Great Britain fundamentally only in having the same king and in desiring to stay connected. The Treaty of Versailles recognized this, in that it gave the mandate for the Southwest Protectorate to "His Britannic Majesty, for the Union of South Africa."

"Isn't it dreadfully hot down there?" The coldest that I have ever felt anywhere was at Edendburg, Orange Free State, at 6 a. m. on a winter morning. Most of the Union has one or another sort of temperate climate; perhaps I can indicate these by comparing, as to climate, places in South Africa, with those that have the same in the United States:

Capetown .....San Francisco
Kimberley .....Salt Lake City
Johannesburg .....Denver
Port Elizabeth .....Galveston
Durban .....St. Augustine, Fla.

Then a word as to the negroes in South Africa. There are a million and a half white people and five million negroes in the Union, in an area somewhat larger than California and Arizona combined. The negroes are for the most part only slightly emerged from their original barbaric stage of progress. They are not admitted, with rare exceptions, to any voice in the government, but there is a special department that deals with their affairs. Scattered pretty well over the country are many mission stations What education the natives get, and what care is given to their particular interests, are almost wholly the work or the results of the work of these missionaries. Natal province, where the Zulus live, is dotted with mission stations; some are of local bodies, such as the Wesleyan Methodist Church of South Africa; many are from other countries, including Scotch, German, Norwegian, Swed-

ish, American and English missionary societies. Natives, that is, negroes, are employed extensively in all unskilled work; they get perhaps ten dollars a month and found, but their work is not very efficient as a rule. The negroes speak their own languages mainly: Zulu, Xosa, Sechuana, Sesuto, etc. These are beautiful languages, sounding not unlike well-spoken Italian, but with the addition of several curious but rather euphonic clicks,—consonants that can be demonstrated with the living speech, but not described accurately. The missionaries are teaching a fair number of the natives to speak English or Dutch.

So thoroughly are both English and Dutch the languages of South Africa, that it is provided in the constitution of the Union that all public papers shall be in both languages. The stamp collector will recognize this on the stamps; railroad tickets are printed with the "going" part in one language and the "return" in the other. In the new colonization of the Southwest Protectorate by South Africans from the Cape Province and the Orange Free State the languages are receiving a new field in which to be equivalent.

There is good educational activity in South Africa today. Within the Union there is compulsory education through the eighth grade or to sixteen years of age, for white persons; in Rhodesia the same is now true. Good high schools are found in every large city; there are universities at Capetown, Stellenbosch and Johannesburg, and colleges in four other centers. Every town of any size has its art museum and museum of natural history, usually combined. There is an active "South African Association for the Advancement of Science," known usually by the "chemical" symbol of S_2A_3. A fair number of American scientific men are working for the various government bureaus; but the tendency is now to produce their own workers.

A South African literature is now arising, in both languages. Thus far the output has been mainly poetry. The prose literature in English is worse than negligible; the

"South African novels" thus far have been travesties on the life of the country. Even Olive Schreiner's famous "Story of an African Farm" is at best a transcript of one phase of life in one district. With the recent development of the South African form of Dutch, which is essentially the Flemish variety of the language with simplified spelling and grammar, a prose literature in that language has begun.

Such then are some outstanding features of this new and growing nation: a nation that promises to become a second United States; a nation that, like our own, is welding diverse elements into one people; a nation amid whose hospitality I spent five happy years, and to whom I owe much that makes life really worth while.

A Child's Poem

The Sea

The sea, oh, the beautiful shining sea,
Always comes right up to me,
And when I sit upon the sand,
It whispers noisily.

The sea is a wonderful thing to me,
It is so big and strong.
The waves come in and out all day,
They sparkle all the time.

—Caroline M. Smith (age 11).

Some of My Worst Teaching Mistakes

BY A SCHOOL PRINCIPAL.

SOMETIMES when I think back over my experience as a teacher I am led to wonder that I am still in that line of work—that in my first years in the school room somebody interested in the welfare of pupils and schools did not tell me frankly that I ought to seek other fields for earning a livelihood. It is almost unbelievable that mistakes as great as mine were actually overlooked and that I was allowed to continue to be one of the guides of American youth and one of the mentors who work to prepare them to assume important duties for the world. How much injustice to my pupils and to the public at large resulted from that carelessness of those who saw me teach, and so knew my unfitness, nobody realizes more than I, and nobody regrets it as I. But I do not think that I was entirely at fault. And I do not very much blame my superiors in those first days, for I do not doubt that one of the principal reasons why they did not speak was that the memory of their own early mistakes came to them and made them unwilling to say what would have been so fitting.

The mistakes which I made are common ones. I have seen many other teachers blunder just as I did, and since I have been a school principal I have made it a point to help my assistants—especially those who have had no previous experience—to avoid falling where I fell.

But why should so many men and women be trained for teaching and allowed to go into a school room and begin upon their labors without the simple lessons that are so much needed by beginners? Sometimes it seems to me that the practical side of the work is neglected in training school courses while the theories are stressed uselessly. In their study of psychology, methods and the like, students are al-

lowed to overlook some of the first principles of the work they are preparing to enter. As a result, when they find themselves before pupils they are not ready to meet promptly many of the commonest problems that face them, and they lose valuable time, precious energy, and priceless enthusiasm —both their own and, worse, that of their classes.

If I did not believe that there is a remedy for the situation, I would not tell of my own serious mistakes. There is one, and the very first step towards it is to let prospective teachers know some of these things which they are sure to meet early in their work. In my own case I remember advice that was given in a class in pedagogy (by an instructor who had never had any teaching experience except in college and university) which was supposed to warn us against some of the worst mistakes I have made. It was couched in excellent English and was undoubtedly based on sound knowledge, but it failed to accomplish what was intended with more than one member of the class. Graduates of other institutions, with whom I have talked on this subject, also marvel at being "turned out" teachers without effective instruction on some of the commonest and earliest problems in teaching.

It is said that a teacher requires three years "to get into his stride." My own career convinces me of the truth of that remark, and I am glad to be able to say that the mistakes I tell about were all at least well on the road to correction by the end of that time. These were not my only blunders, doubtless, but they were my worst ones, and they are so common that they seem to warrant attention.

My first mistake was in going into my classroom without knowing just what I was going to do. Imagine that! Today I would never do that in spite of some years in my profession, but that first day—and too many days thereafter—I met my classes without any real idea of what I planned to do. There were three reasons, I think, why I made this mistake. First, I, a college graduate, who, of course, was well equipped to meet the duties and problems of all later life,

was to teach English grammar. Of course grammar was familiar to me. Had I not studied it myself all through the grades? Had I not become familiar with it also through Latin, French, and even German too? Had not my best grades in college been in language? Why, of course the subject was at my command. Secondly, my pupils were young —between ten and sixteen years of age—which gave me a very unwise and entirely unnecessary confidence in myself. And lastly, the other teachers of the school, whom I saw intimately, seemed to make no preparation. I overlooked the fact that they had had experience, and further I failed to realize for some time that they did plan every day's work.

It was not until I had been caught a few times—until there had been awkward pauses during which I sought almost frantically for the next thing to do; until there had been some embarrassing questions asked of me by the pupils; until I had been forced to put over until the next day some matter that came up for settlement; until I had actually been forced to admit my ignorance of certain things—not only in subjects that were unrelated to my work, but even what was unquestionably in my province—it was not until then that I mended my ways and began to plan, to study each day's work, and to try to foresee and prepare for the questions and discussions that would naturally come up in classes. And it was not until then, of course, that I began to have the enthusiasm and confidence so necessary in a teacher. And it was not until some time afterward that I regained in some measure the faith of my pupils.

How unnecessary this experience of mine was! I assume my share of responsibility for it, but I cannot help feeling that a little interest and questioning on the part of my principal, and perhaps a convincing demonstration in the education class at college—so easily given—would have saved me and my classes those wasted weeks at the beginning of my teaching. I always ask my teachers—those who have not been long in the work and those new to my school—about

their plans for their first day's classes. Not because I especially want to know what they are to do, but because I want to know that they know. The memory of my own mistake in this direction is still fresh.

From this mistake, underpreparation, I went to the other extreme. My next trouble was over-study. This was certainly less an evil than the other had been, for I did know my subject and did have material for questions, answers, comparisons, and discussions; but there is no doubt that I would have had much better results if I had not confined myself so closely to my work. I studied in the morning, often rising at five o'clock to get extra time; I studied during the noon hour; and I began to study again almost as soon as the school day was over. I came to begrudge the time spent with the daily newspaper and I never looked at "light" reading. I simply studied, studied, studied, from morning to night. How could I help becoming "stale"? How could my classes feel the enthusiasm necessary for the best results? I had none to impart to them. I took pride that I could force my mind to do what I wanted of it, without knowing the bad effect of what I was doing.

Furthermore, in my familiarity with my subjects—the ones I willingly taught—I lost sight of the fact that my pupils were less mature than I and that they required explanations on all sorts of points that were perfectly clear to me. A few words of advice from the principal above me, which are among the very small number that have ever been given me in my work, and an accidental discovery of my own helped me to correct this mistake. It was not unnatural that I should go to this extreme after my first experience, but there was another large factor in leading me to it.

This was my consenting to try to teach subjects which were entirely out of my chosen field. That was a mistake which put a heavy burden on my shoulders, which sapped my strength and my spirit, and which robbed the pupils under me of their full due from the school. And it is a very, very common mistake.

However much I may tell myself that I did only what was necessary, I cannot satisfy my conscience in this matter. I was in a small school where the range of work was so great that each teacher was obliged to accept subjects which were distasteful to him. In my group, both at the beginning and for a long time afterward, were subjects utterly unrelated. My own work I enjoyed and found reasonably easy. In it I was able to get results that pleased me; but when I tried to teach branches which I did not like, in which, sometimes, I had been poor in my own school days, and for which I had no kind of real preparation, the way was hard for me and for my classes. I felt no confidence in myself and my pupils felt none in me. Probably there is no way in a small country school for subjects to be distributed among the faculty so as to avoid giving teachers work for which they do not feel competent, but the matter needs to be met as squarely as possible. Both principals and teachers should be frank and should make their arrangements not on the basis of convenience or personal advantage, but in the interests of the pupils and the community. The way to this mistake of mine should be made as impassible as it can be made.

Perhaps the worst mistake of all, however, was not any of those already mentioned, but one in which I was myself the chief sufferer. In my day's program there was no place for systematic physical exercise. From morning until night I confined myself to my work so closely that seldom was more than a half hour of each twenty-four spent in the open air. I lived near the school building and was able to walk to it in less than five minutes. The trips back and forth and a short walk to a newspaper stand, together with occasional Saturday hikes, constituted my exercise. If I had realized earlier the folly of this course I would today be much better off. Of course, I knew what authorities said about the need of exercise, but I felt that what they said did not apply to my case. Besides, if it did, I was taking all the time for exercise that I could afford to devote to it. I needed all the time for

my school work, and I applied myself persistently, proud of the will power that made it possible. Quite by accident, one day, after an afternoon of exercise and an evening of "light" reading, I discovered the error of my way. A little testing proved conclusively that a certain amount of study, supplemented by exercise and recreation, prepared me better for my duties than could my former method. Confidence, joy, enthusiasm, and optimism gained under this plan far more than offset what the sacrificed study could have given me. But it required a long period of working at half efficiency, and later two years of utter idleness, fully to make me realize the importance of this lesson. Surely this worst mistake was costly enough.

Of course these four greatest mistakes that I made were not the only ones to be charged against me, neither are they the only ones that are common enough to warrant mention, but they are the only ones with which I wish to deal here. Mistakes in the method of approach in class work, mistakes in the manner of handling pupils, and all sorts of other mistakes that could be cited, however, come also, in the same category, it seems to me, when we consider what can be done to reduce blundering on the part of teachers. It is not right and it is not necessary that we learn these things through hard experience in the school room as full-fledged teachers. Practice teaching helps, but it is usually done under conditions which do not exist in most schools. Simple advice is not enough. What we need is precept and example going hand in hand, and showing very plainly and very convincingly some of the things not to do and some of the ways in which the effectiveness of the teacher can be entirely destroyed. And all this should be brought as close to the student as possible; it should be very personal.

Dealing successfully with growing children of all types of mentality and training is a work full of pitfalls in all directions. New and unexpected situations are constantly arising in which an impromptu decision must often be made.

An unusual amount of tact and a keen sensitiveness to the feelings of others—a sensitiveness that warns one what another is thinking or is going to think—are necessary for the fullest success. Not all of us have these in proper measure, however, and when surprising developments come we do not know what to do, and we blunder. Anybody with experience in the classroom knows many of the surprises in store for the beginner, and it seems to me to be important that these be told and that the benefit of the lessons we have learned be given to those just starting. If it is necessary, let us put some student in charge of the class in education to conduct it and have a recitation on some assigned subject, and then let us "frame up" some plot and present some common classroom situation and see how the teacher meets it. Of course this would need to be done judiciously, with the proper selection of the teacher, and it would have to be explained and discussed properly in order that the right impression be made. Serious damage can be done unless this is true.

Superintendents and principals have their duties in helping teachers meet their problems and avoid stumbling places, but, unfortunately, there is often a restraint between them which prevents the full confidence needed to meet many troubles. Furthermore, many of the points which cause the most worry seem too trivial to teachers to ask about. And further than this, many of the critical situations rise suddenly and without warning, when there is no possibility of consulting others before meeting them. The wrong solution may destroy a teacher's work for a year or even more. If the teacher is warned in advance of the dangers and if she spends some time thinking of possible ways of meeting them, when the moment does come, even if she does not do as she planned, at least she acts more wisely than if she had not heard of the danger and so were utterly unprepared. Surely the education class is the place for this.

Common sense is probably the most desirable quality in a teacher. When it is joined with tact, sensitiveness, poise,

and scholarship we have an unusual teacher. Sometimes it seems that common sense is not common, or that those who really have it distrust it frequently. Because of this and the grave mistakes which result from it in the schoolroom, we need to point out specifically and patiently the little humdrum, everyday problems of the teacher and give to those who are preparing to enter the profession some practice in solving them. Unless we do this we are not just to the prospective teacher and we are far from just to the children who will be her first charges. There is no glamor to teaching this kind of thing. It does not mark one as a leader in educational thought. It does not attract to one the attention of the profession nor the notice of the public press. It may even bring one into contempt with some of the students whose limited vision makes it impossible for them to judge true values, and it may lead one's colleagues to feel superior. But what matter these things, in the long run, if the work of the school is really effectively aided in this way?

A Child's Poem

A Rainy-Day Thought

Oh! you large drop,
Doesn't it hurt you when you flop?
On the ground so low,
Off the roof you flow.
The fairy inside you,
Is easy to see.
This is what she says to me:
"It is wet in here,
But what do I care.
This is a drop of love,
We come from up above.
God sends us here,
So do not fear."

—Evelyn Thomas (age 12).

A Teacher

ANNIE MARION MACLEAN, EVANSTON, ILL.

SHE was a winsome woman—sturdy like a fall flower—not a caricature, as traducers of teachers would have us believe; she was so learned that her speech was simple, and her manner sweet as an idle beauty's. Each thing and creature on the earth had value in her eyes as part of a great whole planned wisely. She sipped from Sophocles and Socrates, from Dante and from Horace; she knew the courses of the stars, the action of the tides, and was at home with Einstein and Rousseau. She saw that economic laws hold men in bondage, was versed in Malthus and Spencer, and counted Comte as a friend; she loved the nations of the earth and knew the problems of mankind. She plumbed the depths of politics and voted like a seer. A symphony to her was charming, a picture a delight, while the home affairs of women interested her much. And she loved the little children everywhere.

She led her students out to view wide fields, from stars to fertile meadows; from steaming streets to dungeons. They were charmed with her interpretations of life and the everlasting mysteries. Year by year they staunchly swore allegiance to ideals; and year by year they passed out to mingle in village, town, and city, with the unlettered many and the lettered few, but never did they lose the vision. For them she made life purposeful and all human creatures their friends. They often forgot the theories of Kant and Hegel, and flushed dull crimson when asked of Schopenhauer, while over others they were very stupid. But the woman who taught them they never forgot. She gave them, with lore from books, herself and her clear valuation of life. The least little thing has its place, she insisted, in the scheme of the whole, like the petals and pollen of flowers. Thus did she flay snobbery.

Her life enthralled a multitude; her death opened their hearts to work for their fellow men.

Health Habits, Related Knowledge and Problems of Health

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(*Concluded, from January Education.*)

KNOWLEDGE RELATING TO COMMUNITY HYGIENE.

The Establishment of Attitudes.

There is, however, a type of health information about which there is no question of its value—the information concerning community hygiene and social hygiene first, and of slightly less importance the information about occupational and school hygiene. Now we are thinking about those problems of conduct which we call social conduct. When each house had its own well and pump and houses were widely separated the question of water supply was an individual question and its solution was an individual matter. Each householder did what he had always done or what he had been taught to do. But the water supply of a city,—whose conduct does that depend upon? Of course there are certain individuals whose duty it is to regulate and attend to the proper maintenance of the water supply system, but they do not authorize the maintenance of the system according to certain standards. That authorization is done in the democratic communities by the representatives of the people and in even the most badly running city government the citizens determine in broad measure the conduct of city affairs. In social psychology this is known as the influence of public opinion. Each individual contributes his quota, by non-opposition, if by nothing else, and certain individuals by the strength of their convictions and by their capacity to make public appeal wield great influence in moulding this public

opinion. In individual psychology we know this same phenomenon under the caption of attitudes. Our attitudes and interests determine the welcoming and rejecting, the agreeing or disagreeing, the speaking for or against, and the working for or against, which we all assume toward public issues. On the surface the most that an individual can actually *do* along this line is to cast his vote, but really his influence is far wider. Of course he can do his own part—avoid infectious diseases, obey quarantine laws, use care in the disposal of refuse, etc. But even of greater importance is his support of progressive policies and measures. Every man takes a more or less receptive or obstructive attitude toward every issue presented to his attention and it is the sum total of such attitudes which constitutes public policy.

How are these attitudes created? The laws of learning are always the same. These attitudes are created by getting them to act, by giving them practice, and by associating with them satisfaction. To get a person to take a stand for a thing I suppose most fundamental is a need or desire for the thing. But before the need or desire arises a bias can be given by getting the pupil to make a verbal reaction. A friend from South Africa told me of the difficulty a village had in introducing a water system to bring water from the mountains—they had always used the water which passed in ditches through every street and to the villager there was no need for change. But teach a child in school of the need of a pipe water supply, and when the occasion arises at some future time for him to take sides he will already have the die cast. This previous verbal reaction in school has already biased him. To be sure, if a strong need or desire conflicts with a previous verbal reaction the former may have the upper hand. The maker of pumps may strenuously object to a pipe system notwithstanding what he has been taught. But the average citizen who has no "interest" may be depended upon to take the side with which custom or education has most deeply impressed him. So a presentation of civic

facts and needs will have its direct effect in the "civic" conduct. As far as the direct influence on conduct goes, of knowledge of physiology or knowledge of sanitation and public health I should unhesitatingly say that the latter will have by far the greater influence, for the former hopes to make a verbal reaction turn into some other motor reaction, but knowledge of sanitation relies for its effectiveness on the use of the precise verbal reaction formed. With this purpose in mind the following sentences from school readers in community hygiene and sanitation seem to be well adapted toward helping to create a favorable attitude.

"When we add to this interference with health the annoyance of the griming and smearing of buildings, the coating of sidewalks, the blackening of curtains, carpets, clothing, and all delicate fabrics, and above all the obstacle this rain of soot offers to keeping our windows open, it is clear why the problem of checking the smoke nuisance has been taken up so energetically by health officials."

"In other words, if the health officers and property owners will work together, they can rid any town, village, or summer colony of mosquitoes within two years. The only thing that the town has to do is to make up its mind that it will not permit the mosquito, and persist in draining and kerosening until the pest is wiped out."

This information in community and social hygiene as well as occupational and school hygiene may well include the following topics: buildings, streets, parks, playgrounds, public baths, water supply, illumination, sewages, regulation of nuisances, street cleaning, garbage removal, hospitals, clinics, special institutions for atypical persons, hygiene education, boards of health, campaigns against certain diseases, control of food, milk and traffic regulation and fire protection, as well as certain more general topics concerning the social evil, school and occupational hygiene.

Dr. Winslow mentions seven foci for the information essential for the promotion of public health.

"1. The expansion of everyday conceptions of cleanness, to include the vitally important sorts of cleanness can only be acquired through knowledge of the principles of bacteriology, best by actual demonstrations of cultures, which the student can see and handle. Much of the inspirational health teaching of the present day shows that even the would-be teacher of hygiene has quite failed to grasp the essential distinction between dirt which is dangerous and dirt which is merely unsightly.

"2. In the second place, the distinction between the harmful and the harmless bacteria should be made clear, with the fact that the dangerous types have their origin only in the human and the animal body; so that a vague fear of dirt and disease in the abstract may be replaced by an intelligent sanitary conscience which will facilitate the isolation of disease in its early stages.

"3. Thirdly, the pupil should be given a conception of the way in which disease germs are transferred from one person to another by water and other articles of food and particularly by insects; and of the methods of preventing such transfer by measures of public sanitation. The control of the fly nuisance offers a peculiarly valuable direct contact with personal experience in this field.

"4. Next in importance is a comprehension of the nature of the struggle between the invading microbe and the human host, with an intelligent grasp of the principles of vaccine and serum therapy, which promise to play an ever-increasing role in the control of communicable disease. With instruction of this sort the obstructive efforts of the anti-vaccinationist would lose their power and smallpox, typhoid, and diphtheria could be brought under complete control.

"5. In the higher grades the principles involved in the control of tuberculosis and infant mortality should find a place. In these and other fields an intelligent co-operation of the citizen is vital to success and the co-operation can only be secured in a community where the elementary principles involved are understood.

"6. If the citizen is to play his part in the broader community struggle against preventable disease he should understand something of the main objectives and the general activities of the health departments of city, state, and nation. The health officer who operates in a county where any substantial proportion of the citizens have received a basic instruction of this kind would be able to accomplish results in the saving of lives of which we have scarcely dreamed in the philosophy of the past.

"7. Finally, we should recognize a growing and a very sound tendency to introduce into the school curriculum well planned instruction in regard to safety in the street and in the home. One-half of the victims of automobile accidents are children, of whom over 500 are killed and 12,000 injured in New York City every year. The schools of St. Louis reduced fatal accidents of school children by more than 60 per cent through intensive safety teaching. The Safety Institute of America is planning to furnish a special information service for the teachers of the city along this line next year."

Active Attitudes.

What I have now described is the information attendant on the formation of attitudes relating to community hygiene. These attitudes might well be called "passive attitudes" as distinguished from the positive, go-and-get-'em, active attitudes which we more often call interests and which do not wait until asked to voice their opinion but seek opportunity to speak their mind to persuade others to the same opinion and even to work for the cause. It takes more than mere information to cause this active interest, but it is true that information is one factor needed. In this respect the active interest in community hygiene and the habits of personal hygiene are quite different. Personal habits do not depend in the first place on information at all, are usually established on a minimum of information, and when the information appears to be the cause it is "loaded" with some sort of instinc-

tive appeal. But the active interest in community hygiene depends entirely on the power of the idea, and this in no magical way. In some the habit of working for the community good is so well established that a new suggestion is enough to set off the new impulse. In others the acting on an idea has become so conditioned that given an idea with an "ought" attached to it, the person looks around for the opportunity to act. And then there are others who become caught up on a wave of public activity as in sanitary campaigns, fly-swatting campaigns, etc., but always on the basis of an idea. So active interest of this sort depends on an idea *and* something else. To prepare for this ahead of time the best education can do is to give practice in community service. Usually this service must be opportunistic and cannot choose the most important activities which are of necessity reserved for adults. As examples of this community participation I mention keeping streets free from litter, serving as traffic officers, oiling standing water surfaces, distributing handbills and circulars. The Boy Scout activities give many illustrations of this habit formation which will make adult participation and leadership in community affairs an easier thing.

Health Problems.

Health Problems Arise from Maladjustment.

In actual living a problem naturally arises with regard to health when something goes wrong with our bodily functioning. Perhaps it is an accident and actual injury, or perhaps we have overdone and suffer from fatigue, heart trouble, hardening of the arteries, or perhaps we have failed to observe some rule of health and suffer as a result from anemia, indigestion, or from poison secreted within the body. At any rate, as Dewey has so plainly shown us, we have to think when the situation arises toward which our habits do not offer satisfactory solutions. This is a time when knowledge

is of value in forming the right habits. Without knowledge the habits established might be those of taking a patent medicine, or of practising auto-suggestion, but knowledge of correct physiological principles might give the understanding by which the sufferer could infer the line of action which would restore normal conditions again.

The Nature of Practical Problems.

The question which most often arises in practical experience is "What should I do?" Such questions are sprinkled through the Stanford Revision of the Binet Scale. "What must you do when you are sleepy?" "What's the thing for you to do if it is raining when you start to school?" "What's the thing for you to do when you have broken something which belongs to some one else?" "What ought you to say when some one asks your opinion about a person you don't know very well?" Similar questions in hygiene would be "What's the thing for you to do when you feel a cold coming on?" or "How can I relieve a headache?" or "What should you do for a fainting person?"

The unthinking solution of a problem is the trial and error solution. Sometimes solutions are stumbled upon as Fletcher's rule.

The rational solution of such a problem as those above involves three main processes: (1) ability to observe the situation, even more than in customary, surface observation; (2) knowledge of rules and principles and facts relevant to the solution at hand; (3) ability to see the relationships and to draw the conclusions. These three partial processes are essential to the solution of a practical problem and each process is independent and needs special attention by itself. First of all the student has to learn to observe in an objective way the essential features of various situations influencing health. Then the student needs to have at hand a stock of valid rules and principles and facts. He also needs practice in relating

those general principles and facts to particular circumstances where they may apply.

In the examination of two texts, one a beginners' text in hygiene, the other a high school text of physiology and hygiene, it was found that the questions roughly grouped themselves into the following categories:

	Elementary Text	H. S. Text
Observation	31%	3%
Explanation (why?)	27%	27%
Personal preference	4%	0%
What must one do?	4%	0.4%
Fact (is? what? where? when?)	22%	50%
Relationship (what is the difference? how? compare, which?)	12%	21%

It will be noticed that the most important form of question, the "What must one do?" question, receives scant attention. The "why?" question tells the solution to the practical situation and then asks for the reasoning leading up to the solution. The "why?" question lacks the motivation that the practical question has. The difference between the "What must one do?" question and the "Why?" question is the crux of the difference between the project method and the older problem method. The latter method usually demanded an explanation and hence contained only an intellectual appeal —it was merely a form of mental gymnastics. It was going through the form of reasoning without the appeal or motivation which a practical problem has.

The elementary book gives a good amount of drill on the first elements of problem solving—carefully observing the details of a situation. Both books give a good amount of emphasis to the calling up of facts which bear on a given situation and also noting likenesses, differences and other

relationships between situations. But these are phases of the reasoning process, essential in themselves, but always subsidiary to the whole practical problem.

Importance of Knowledge in Reasoning.

It will be noted that this problem solving makes use of information and is the main reason for teaching the facts and principles of anatomy, physiology, and bacteriology. But we have only done a ridiculous thing when we have given information alone and a useless thing, as so many of the older books did. More important is the utilization of this knowledge in its application to the solution of practical problems.

The deduction of habits of hygiene from physiological knowledge is most difficult, however simple the habits may seem. These correct deductions from physiological principles to conduct habits can only be made by the most intelligent individuals. Hence it is a question as to just how difficult a problem of this sort a child of a given age can solve with the information and observations clearly at hand. Few adults are able to reason for themselves the true cause and remedy for their disorders. The widespread use of patent medicines and other quackery indicates how poorly adults have drawn on available knowledge. Most of us are quite willing to accept rules of health as we find them and to use them as we will. Very few of us pick up physiologies and try to deduce from them health habits. Should we expect more of school children?

It is a question, therefore, whether to put the solution of problems in the text in the form of simple rules or whether to give the necessary physiological information and allow the children to reason for themselves the solution with the accompanying practice in problem solving. Most hygiene texts adopt a middle ground. They certainly fill the text with rules and guides for conduct which a skilful author might

have put into the form of problems. And they ask as problems questions the answers to which might better have been told outright in the text, so involved is the reasoning leading to their solution. As an example of the former:

"The flowing of blood can usually be checked by pressing the thumbs firmly down on both sides of the wound upon the blood vessel that has been cut. Sometimes it is necessary to twist a knotted handkerchief tightly about the limb with the knot over the bleeding vessel, and pressing upon it, as in the picture on the opposite page. If the blood is of a bright red color, and if it comes in jets, in tune with the heart beat, an artery has been cut and the handkerchief must be tied between the wound and the heart in order to stop the blood flow."

This is admirable material for problem solving following a study of the circulation of the blood—the reasoning needed is rather direct and obvious and not difficult. On the other hand, consider this problem: "Why is the use of the minor muscles exhausting to the nerves, while the use of the major muscles strengthens the nerves?" The principles concerning the interrelations of the circulation of the blood, muscular activity and tone of the nervous system are so involved and so important that more would be gained in telling outright these facts rather than offering the possibility of misconceptions.

As a matter of fact a great many of our rules of health are not easily deducible from physiological or anatomical principles at all—they are based on experimental evidence and the physiological principles underlying are still hidden from us. Almost all of our knowledge of food and eating comes to us from experimentation and not from deductions from our knowledge of the workings of the alimentary system. Likewise our knowledge of mental hygiene comes from experimental procedure and not from deductions.

General Solutions.

After all, perhaps the best that the school can do along the line of problem solving in hygiene is to present a few very general problems which either recur again and again in experience or which have solutions which occur again and again. Such are: going to a doctor when ill, the dependence of return to health upon the adoption of correct habits of living, the dangers of patent medicines, the need for frequent physical examination, the results following use of drugs and intoxicants, and above all the information as to where information can be had when accidents or ill-health occur.

Problems Solved Do Not Necessarily Lead to Conduct.

Finally, not too much should be expected even when a pupil has been taught to solve problems relative to health. Even the solution of a problem does not lead to conduct. Solving a problem is purely an intellectual exercise. The arousal of conduct is the same as ever. Some motive must be aroused and stimulated and this as always may be some instinctive tendency or some learned activity which functions as a need or want or drive. Even though we teach boys and girls to reason about their bodily machine we need still to consider the problem of how to turn this into conduct.

Summary.

In the matter of conduct leading to and maintaining health, habit is essential and primary. Information of a scientific nature does not of itself lead to such conduct—it must be conditioned in some way by association with some motive force before it will be a stimulus to conduct. Accordingly educators should be very wary of including more knowledge in the school curriculum with the expectation that it will lead to activity. The same fear need not be felt concerning knowledge of community hygiene which will create a bias or atti-

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tude tending to make the future citizen take the intelligent side in contributing to public opinion and in wielding his force as a citizen. Problems ordinarily arise when the normal bodily functioning goes wrong. In the solution of such problems scientific knowledge is a necessity. School texts are somewhat doubtful as to just what reasoning in the field of hygiene implies. As a matter of fact, too much should not be expected in the way of teaching a child to reason concerning his health, first because it is so difficult at best and second because so much of our hygiene is based on experimental evidence which precludes deductive reasoning. Perhaps a few general solutions may be all that can be expected to actually function in the conduct situations of life that actually call for reasoning. Finally, even ability to solve practical problems relating to health is no guarantee that hygienic conduct will ensue.

Knowledge, even in the form of definite rules and suggestions must of necessity play a secondary part to habit formation and should be stressed even less than it is at present in the teaching of hygiene. Equally important, however, with the question of what knowledge shall be taught is how it shall be taught.

The Growing Girl

MILDRED O'CONNOR, STATE NORMAL SCHOOL, WORCESTER, MASS.

SO much has been said and written about our "American Flapper" that practically all versions of the subject have been expanded and and debated on, yet few have attempted a discourse regarding the average American girl, between the ages of thirteen and sixteen. The "flapper" is already passing away, with bobbed hair, short skirts and other styles that are liable to change—still we have the same young girl with us who needs the careful study and attention which the era of "flapperdom" has given rise to.

When a young girl begins to grow rapidly, and it seems that overnight she changes from a child to a woman, it is no wonder that she sees life differently. She does not grow proportionately, and her arms and limbs are so long that she does not seem to know what to do with them. People speak about how awkward and gawky she is, and she cannot help but become self-conscious. It is during this period of rapid growth that her health needs to be carefully preserved and protected. Her environment, of course, is to have a great effect. Indoor work and close adjustment of the eyes and small muscles should be prevented—this includes too frequent visits to moving picture shows. Outdoor life, with not too strenuous exercising of the larger muscles, is very necessary, and plenty of good wholesome fun. She can easily obtain this in athletics on sport fields or playgrounds which abound in most communities. Her food, clothing, sleep, recreation, and companionship, all need care and adjustment to preserve the health of the young girl.

Professor James, the psychologist, says that the young girl's mind is a "buzzing, blooming confusion." With her rapidly growing body her reactions to the same stimuli are

different and thus the customary sensations change. The senses become more acute. She becomes finicky about certain things. She "cannot eat this" or "cannot bear the smell of that" and she has a new desire and interest in colors, which before did not attract much of her attention. Acting on the spur of the moment, she is due to respond to stimulus in various ways, for one day she is all eagerness to do something, and the next day she has forgotten all about it. Now that she feels grown up, she acquires a certain amount of dignity; she desires to become independent; self-assertion is shown; and she has decided opinions, which the adult mind not understanding, considers stubbornness. Her opinions are partly right and partly wrong, and they should be respected, but not allowed to dominate. A little careful direction and encouragement of the right kind is necessary. If her pastimes are well chosen and her companionship of the proper kind, then her opinions and ideas are sure to be influenced along the proper lines.

The time has arrived when Dreams and Air-Castles are built continuously. "What I would do" is uppermost in her mind. All her past experience, her reading and imagination are used to make her the heroine of every dream. They are all centered about herself, and some one else—either her teacher, her chum, her boy friend or some one whom she almost worships. These "Air-Castles," so built, are often torn down and rebuilt, and there are still a thousand ways of how "I would do it." She generally dreams of doing great things, of bringing help and comfort to the oppressed and the needy, or of how she could appear "wonderful" in the eyes of some one. How often a girl in moderate circumstances dreams, if she had the money, what she would do to help a poor family! How she would surprise them with supplies of food, beautiful clothing and all the comforts of life! There certainly must be some value to her mental powers, because she does use reason, imagination and often deep thinking to make these dreams different and unusual.

As she grows older, she does not cease altogether to make these "Air-Castles," but they do not include the silly, wonderful and utterly impossible dreams of the thirteen-year-old girl. Many of these fancies are based on the books she reads.

A love of reading is developed, and she is willing to attempt any book, especially the emotional type. All books with sentimental sensations are sought for. How she devours the girl series—anything which is concerned with girls of her own age appeals strongly. Put one of a High School series books in her hands, and not until she has read every word of it is she ready to do anything else. How many a mother complains that her daughter "always has a book in her hands, and she is of little use since she started reading those girl books." Not only the light, sentimental books are read, but statistics show that she often reads some of high literary value. The characters of these stories are often imitated, and worship of the heroine affects her for days. "I am something similar to the girl in that story, and she accomplished such an act! I think that I shall try it!" Such are her thoughts. It will be fun, and thus she is influenced. It is during this period that a taste for good and valuable books should be developed by the parents and teachers in the High schools. Along with the training of her mental powers, one of the most effective is in the form of debates or arguments. Her mental energy just enjoys the reasoning, quick thinking and the enjoyment of having convinced or having won over some one to think as she does. This arguing is beneficial, and encourages that thirst for knowledge which the new freedom of women has developed. It is very satisfactory to see the manner in which our schools are now conducting girls' debating teams in such a successful way. All these air-castles, dreams reading, debating, arguing and ways of expressing themselves are training the mental powers, so that later they are ready to take the newly made place for women in the intellectual, social and political life.

Previous to this age in a girl's life, she has been satisfied

with playing alone, or with a few playmates, but now there has grown an instinctive craving for companionship. She no longer wants to be alone—in fact, she is very often heard to say, "I'd love to go, but I don't want to go alone." A boy at this age has his "gang," and the question often arises why has not the girl her "gang" or such a strongly bound organization. The prevalent answer is, that in primitive times the men and boys of a tribe always joined in groups, while the women and girls remained separated in their homes. Thus after a long period of years, the boys' "gang" instinct has developed and become strong, while it is only within the last few years that the girls have made any progress towards forming and joining organized groups and clubs. This is one reason why girls' clubs are not so strong and lasting as the boys' "gang."

In the girls' group, the members are generally invited to join and often all the girls in a neighborhood, or in a class in school, join the clubs. As it is not organized and really has no purpose, the members gradually drop off, leaving about five or six, and these quickly form a "clique." This "clique" is generally composed of girls of the same type, ideals and social standing, all having the same interests. The names given to these clubs are usually attractive, and are chosen after careful deliberation. A few examples are—the Jonquils, the Four-leaf Clover, the Ideals, the Theresian Flowerets, and numerous others. Within the last few years there has been much progress made towards organized, well-planned and purposeful girls' clubs, such as the Girl Scouts, Campfire Girls and others, among the churches; each sect, realizing their value, is working to form clubs for its girls. The leaders chosen are those who have ability to fill these positions. It is often the case that the success of a club rests with the personality of the leader. She is presumably a little older than her companions, and should love and understand them. If such a leader is not liked or respected, it will be difficult to find members to join a club, and so it is with great

care that the right person should be chosen. These clubs have much influence on the character of the girl. The individual clubs have no special value, but it is the well-organized ones which will help her. It is either going to make her broad-minded, or the opposite, self-centered and narrow-minded. She will, as the politicians say, be a good mixer, and will learn to mingle with others of different personalities and aspirations, and realize the value and effective work which can be done through groups.

Now that she feels grown up, and is trying to show her self-assertion, she begins to take notice and care of her speech, of which she was unconscious before. New words are used, and if she cannot think of what she wants to say, there is the slang to fall back on. She thinks it smart and clever, and so effective, to say just what you want in a short, trite way. She knows that some of it is vulgar, yet the habit has been formed, and it is said before she realizes it. The fundamental reason why the girl uses slang is because of intellectual laziness. Those who use it do so often because their brains are too lazy and slothful to think out the proper and correct way of expressing their thoughts and ideas, and it is so easy to use the witty, quick slang.

Along with this same topic is giggling. Practically every girl titters, much to the annoyance of her elders, and to her own relief. How often one sees some girls laughing or giggling over something in which an older person, being more serious, cannot see anything funny or witty. There are times when there are reasons for this giggling, this mild hysteria, though in many cases she does not realize it. The first is nervousness—she giggles because she cannot help it or cannot control herself to stop laughing. Then again, there is the desire to please some one. She thinks because she giggles the person might feel pleased to know that she enjoys the company and conversation. The lack of something to say seems to be offset by giggles, for if one listens to a conversation among some girls, if there is any tittering at all, it

comprises over fifty percent of the conversation—if tittering or giggling can be termed conversation.

One of the most important newly developed interests is—The Boy. He becomes more than a rough, noisy, human being, who just loves to tease, and spoil all the fun the girls are enjoying. They are now more readily tolerated—in fact their company is sought after. The girl now has "crushes" or is a victim of "puppy love." The object which her affections center about is of her own age, and excels in either athletics, class honors or something to which her attention is attracted.

The girl's chum, or confidant, has much influence during this time. She has one particular girl friend to whom she tells all her joys, sorrows and secrets. Without realizing it, she chooses one from a group to make her dearest friend, much as a magnet draws or attracts a piece of steel. This friendship often lasts a life-time, and if broken, the memories of those happy girlhood days are very sweet and dear to her. Great care should be taken in selecting her chum, for the two cannot be together day by day for any extended time without exercising some influence over each other, either good or otherwise. They have, supposedly, the same interests and are willing to help each other along and never let jealousy or rivalry interfere with their future plans of life. They confide their hopes, expectations and ambitions to one another, and in their projected life work they have an equal share. It is but natural that the girl should have some one of her own age to tell all these things to, but how much more beneficial to her if she have also an older person to make a confidant, and be directed by, advised and helped along the right path.

Into the young girl's life comes sometimes a most wonderful personage—a woman who seems perfect, and with whom she appears to be infatuated, and at times so much as to almost adore her. She "dreams" and builds "air-castles" about her, imitates her every way, and considers her as an

ideal. With the different type of girl, the character of the woman chosen to be admired also changes. Perhaps no two girls adore or exalt the same person, but in many cases it is a teacher, a young member of her school faculty, who is chosen. If not a teacher, a senior in the school is sometimes selected. Some may admire a young lady who is pretty and has many beaux, while another may choose one who is not so attractive, but has a very appealing personality. This young lady is very often the leader of a club, and all its members have joined so as to be near her, as character is, or should be, more attractive than mere prettiness. The girl would never do anything to offend her, and often she just stands at a distance and admires her without being seen. It has happened again and again that a group of girls, admiring and almost adoring some young lady, who has now just married, weep and cannot be comforted until such time as they find another to take her place.

An interest in personal appearance arises at a certain period; heretofore the girl has been awkward. Now she wants to appear well before her friends, the boys of her age, and especially the adored one. If her hair is not bobbed, there comes the trying period of "doing it up." Hours are spent or wasted before the mirror, seeing how the different styles of hair dressing become her type, and in trying to train her hair to "stay put." The girl has been secretly combing it, and it takes courage to let the family see it for the first time. If many of the girls between these ages are asked "why they are late" in the morning, the majority will confess that it was because they spent the time on their hair. Many teachers, who do not understand, look at the coiffure and hesitate about believing it. More care is now given to the body, especially to the face and hands. The girls desires to look pretty and finds a new interest in the mirror. If certain foods cause a skin eruption, she avoids them; and on the other hand, she is willing to eat foods, however disliked, if they will improve the complexion and make her attractive.

The perennial subject of interest to women, viz. clothes and dress, awakens in the young girl. Her thoughts are beginning to be filled with clothes and what to wear. She is no longer willing to allow others to choose for her. She has her own ideas on the subject and wants the very latest in style, and too often goes to the extreme. She loves every color and tries them all until she decides what is most becoming for her to wear. She thinks that if she has all the clothes she wants she will be perfectly happy. This is true of the majority of girls, though there are happily many whose other interests are so strong that dress is less important. A wise counselor, whether mother, sister, teacher or friend, will not ridicule or discourage these natural emotions and tendencies, but will seek to sympathetically direct them.

Perfume Vases

Well may the Greeks have loved the perfume Vase!
Outside the tomb of every heart one stands,
Sending its fragrance, made by treasured hands,
Above the crosses of the human race.
Its breath recalls the lost beloved face,
Draws us to other hearts with golden bands
Of quickened love; and all the soul expands
Beneath that touch of sweet immortal grace.

O what in life is of such precious worth
As memory of love—as present love?
These soften all the shocks of earthly woe;
These make us certain of a newer birth
In lands that hover bright our dreams above,
Where evermore elysian attars flow.

—Helen Cary Chadwick.

American Notes—Editorial

There is a suggestion,—we were about to say a challenge,—to every teacher and to every student, in the able and interesting opening article in this number of EDUCATION. "The Humanities versus the Utilities"! Which shall the schools stand for? Which shall be the ambition and aim of the pupils? Whither do these pathways lead? We hope that all our subscribers will read this article at least twice. It is thought-provoking,—along lines which should be seriously traversed by teachers and school officials as well as by individual students in determining courses and in following educational pathways. These pathways lead out into life's highways. Clearness of thought and steadfastness of purpose in the beginning of the journey will make for efficiency along the way and success and happiness in the end. Aimlessness is the bane of scholarship and of post-graduate success. The article referred to should be found suggestive and helpful in determining the aims and activities of many individual students who, perhaps, have been simply drifting with the current, without thinking seriously whither they are going or what they will do when they get there. Early decisions and definite aims about life's activities are distinctly wise and gainful. "Where are you at?" is, perhaps, a justifiable slang phrase. "Quo vadis?" is more classic and still more significant. Both quotations are pertinent for most any pupil and for most any school.

"The Humanities"! What are they? The dictionary says that they are "the studies or branches comprising polite or classical literature collectively,—as philology, rhetoric, poetry, grammar, Greek and Roman classics, archeology, etc."; "the Roman expressed by *humanitas* the highest and most harmonious faculties and powers." "The humanities" is a term "used to designate those studies which are considered the most specially adapted for training this, the true humanity in every man." (Trench, on "The Study of Words.")

"The Utilities"! What are they? In the sense in which they are used by the writer of the article in this number of EDUCATION, they are the studies which will enable the student to get and hold a job which will furnish him with an income and work out into bread and butter and other material comforts,—money that will supply his worldly needs.

"The Humanities versus the Utilities"! Which shall we emphasize as individuals? Which shall predominate in our school systems?

The Public School authorities are wisely solving the problem by establishing two kinds of secondary schools or high schools,—one kind

or group supplying classical and the other technical or practical arts courses. Those who must get to work early and become self-supporting on graduation are placed in the technical school; those who are intending to go to college, or otherwise to take advanced courses in the humanities, elect the classical high school course. Many of our larger towns and cities are providing these two kinds of education. It is well that they should. It means much to all concerned. There is, nearly always, a majority who are obliged to take the practical studies and to get into productive activities where they will be self-supporting as soon as possible. The alternative offered,—of Technical High School or Classical High School,—is wise and good for all concerned. It groups the pupils and gives to each group just what they want, and must have, as a preparation for efficient, successful and happy life-service.

But our question about "the humanities versus the utilities" does not,—or *should not*, stop here. Every student should realize that the humanities may be his, whatever his educational advantages or courses, and whatever his life activities may be. An active, alert mind may achieve a real culture whether in school or in after-school life. The will to know and the determination to grow,—this is essential. There are well-posted choremen in America; and cultured agriculturists; and backwoods statesmen. The "humanities" are not forbidden to any class in a real democracy. The media of culture are upon every hand. The will to learn, the determination to know, these are the main things. The country boy on the farm, the operative in the mine, the sailor before the mast, has a chance to acquire the essentials and the rewards of a real education. Any one who has chosen the utilities can accept also the challenge of the humanities. It is the glory of America's true and free democracy that it produces "learned blacksmiths," and transforms hard-working rail-splitters into Presidents and World Rulers.

Wayne B. Wheeler, general counsel for the Anti-Saloon League of America, recently asserted, as quoted by the daily papers, that prohibition is the best gift that the people of the United States have received from the Government. In detail he backs up the statement with the following assertions, viz., that during the four years of national prohibition there has been a cut of 873,000 in the national death rate, that over $1,000,000,000 have been added to our savings accounts, industrial accidents have been lowered 250,000 annually, with fewer arrests, and a decrease in the rate of preventable illness.

"A few of the cumulative results of four years of sober industry,"

says Mr. Wheeler's announcement, "are: A cut in the death rate that saved 873,000 lives, profiting the insurance companies and policyholders $678,769,000; decrease in the rate of preventable illness equivalent to 1,747,950 people continuously ill for one year; a reduction in the ratio of drunkenness arrests per 100,00 population equivalent to 500,000 fewer arrests for drunkenness in 1923 alone, or over 2,000,000 fewer in the four dry years; a decrease in the penal ratio resulting in 20,000 fewer persons being committed to penal institutions in these four years. Releasing $74,000,000 of charity funds for constructive work; over $1,000,000,000 added to our savings accounts, and over $11,000,000,000 to our new life insurance policies in 1923."

In view of these statements, what should be our sentiments in relation to "rum-runners," "bootleggers," rich men's well-stocked wine cellars, hotels and restaurants that serve liquors on the sly to rich patrons, and the too numerous places where everybody knows that the law is being violated but nobody is doing anything to prevent it? One thing should be done,—and that is to so change the laws that there shall be harmony between the laws of the Nation and of the State. It ought not to be necessary to call in a national officer to clean up a local nuisance. Such a necessity, however, is often the obstacle on which wrongdoers count in openly continuing their nefarious business.

The School Republic is a method of student self-government under supervision which has spread until several thousand teachers in this and other countries have adopted the method. Its fundamental purposes are: First, better to fit our prospective citizens for honest and efficient citizenship, by acquainting them, through actual practice in their youngest and most impressionable years, with the legitimate workings of democratic government; to teach children to govern and discipline themselves under supervision; and third, to supplement their text-book instruction in the theories of civil government by showing them the governmental machine in actual operation, in which operation each one has an active part with a work to do and a responsibility to share.

Mr. Wilson L. Gill, educational director of the Constitutional League of America and president of the American Patriotic League, is the originator of the School Republic. His plan has been endorsed by many leading educators and government officials. Detailed information regarding the working out of the system may be secured by writing to Mr. Gill, whose address is 501 West Mt. Pleasant Avenue, Mount Airy, Philadelphia, Pennsylvania.—*Item from the "Educational Bulletin" of the State of New York.*

Book Reviews

MODERN HIGH SCHOOL ALGEBRA. By Webster Wells and Walter W. Hart. D. C. Heath & Co.

This book follows closely the recommendations of the National Committee on Mathematical Requirements and the College Entrance Examination Board, and hence it is strictly up to date. It contains a minimum course and a maximum course. The former includes the simpler work of the required topics through quadratic equations, solved by factoring, by completing the square, by the formula, and by graphs. This can be completed in one year, while the maximum course would take a year and one half. The authors retain square root of polynomials, claiming, with some reason, that it is good teaching material. The book begins with plenty of work on formulas and evaluation, and uses principles of geometry as a basis for equations. The many problems are unusually well illustrated by means of charts. The reviewer has used similar charts for some years and knows that they are a great help to pupils. Other chapters include logarithms and a brief treatment of the trigonometry of the right triangle, both of which are recommended by the two committees. There are handy lists of classified exercises for review and drill; timed tests without which no modern book is complete; and an excellent "Summary of words and processes which the pupils should know at the end of the course." Enough material is in the 466 pages to suit the most ambitious teacher, and its presentation is very carefully planned. The impression left after reading the book is that it meets modern requirements to a very high degree.—Robert R. Goff.

NATURE SECRETS. By Mary D. Chambers. The Atlantic Monthly Press.

This is a charming little book that will inevitably appeal to a child's interest in the natural world and awaken in him a desire to look more deeply beneath the surface of things to find out *how* and *why* things are and behave as they do. He will be shown that there are good and bad germs; he will learn about "Miss Oxygen at work and play"; where "Lazy Boy Nitrogen" comes from and goes to; he will be surprised to find out that there are sounds that we cannot hear and colors that we cannot see. Withal, he will be given foundations on which to build a scientific mind. And who knows but what any lad of today may be the great and learned scientist and discoverer of tomorrow?

THE PSYCHOLOGY OF ALGEBRA. By E. L. Thorndike. The Macmillan Company.

It is impossible to review adequately in a few lines a book of this character. It is so crowded with food for thought, so full to overflowing with experiments and tests, investigations and conclusions on the different aspects of algebra and its learning, that a brief summary is almost impossible. This book, unlike its companion, the Psychology of Arithmetic, was not written wholly by Professor Thorndike; some of its material was furnished by co-workers in the Institute of Educational Research of Teachers College, Columbia University. The combined production is probably one of the most valuable contributions to the pedagogy of algebra that has appeared in many years.

Some of the topics discussed are: The Psychology of the Equation, The Psychology of Problem Solving, The Measurement of Algebraic Abilities, The Constitution of Algebraic Abilities, The Strength of Algebraic Connections, The Psychology of Drill, etc. There are sixty-four statistical tables, illustrating many of the investigations. In the chapter on problems, the conclusion is made that about nine-tenths of the common verbal problems are undesirable because of lack of genuineness, importance and usefulness; also, "We do claim that the peculiar virtue of the verbal problem is in the framing (of the equation), not the solving." Hence problems should not be grouped according to the technique of the equation. Another conclusion is that "three-fourths of the time usually given to radicals could be saved, with no loss but a net gain to the pupil's development." "The quality of the practice is certainly the thing for science to improve. Anybody can increase its general amount."

One reader's reaction to the book was that "it had to be translated,"—not that the book was unintelligible, but that much of its thought would be lost unless most carefully sought out. Furthermore, it will change some of our surmises to beliefs and some of our beliefs to surmises, and will open up many roads for further travel.—Robert R. Goff.

JACK GREGORY. By Warren Lee Goss. Illustrated in color. Thomas Y. Crowell Company.

This is a most interesting and thrilling story of a boy's adventures in the days of Washington. He takes part in the battle of Bunker Hill and becomes an aide to General Washington, and is sent to Boston as a spy. The story is written in the first person, which makes the events very real. The backgrounds of our country's early history are indelibly stamped upon the mind and memory of the reader of this book and cannot fail to stimulate his imagination and promote the growth of sentiments of patriotism and devotion to duty.

THE TEACHING OF ARITHMETIC. N. J. Lennes, Ph.D. The Macmillan Company.

The teaching of arithmetic is so extremely important, and the number of books on the subject is so comparatively small, that a new discussion by an experienced thinker, is most welcome. Prof. Lennes has produced a book sound in theory and sane in practice. It is in two parts: Part I contains certain general problems of education that have "a bearing on the teaching of arithmetic." It deals with Formal Discipline, Methods of Learning and Teaching, and Motivation. Results of experiments are shown and tentative conclusions made. One conclusion discussed is that transfer of training is possible in regard to scientific attitude, habits of concentration, and of organizing methods of procedure. These, together with a knowledge and skill in the fundamental operations, form a large part of the educative value of arithmetic. "The manner of teaching is perhaps of greater importance than the selection of courses." As to the theory of making school life natural and practical by initiating outside life, Prof. Lennes says: "The problem of real interest to the teacher would therefore seem to be, not how to make the conditions of the school similar to those outside it, but how to improve on these outside conditions so as to make them more conducive to that intellectual life which it is desired to develop." In Part II are Special Problems in the Teaching of Arithemetic. The greater part of this section is devoted to a detailed description of the content and method of presentation of the common topics of the subject. The chapter on the Solution of Problems is especially good. "But, after all, what really matters in life is whether we can face a new situation and master it." Exercises at the end of each chapter make the work a suitable text for classes in the pedagogy of arithmetic. I have read the book with much interest and profit, and consider it well worth serious thought.—Robert R. Goff.

ENGLAND IN THE NINETEENTH CENTURY. By Sir Charles Oman, K. B. E. Longman, Green and Co. Price $1.25.

Beginning with the Peace of Amiens and including the struggle with Bonaparte, the Peninsular War, the early and later Victorian years, the Crimean War, to the death of Lord Palmerston, the age of Disraeli and Gladstone, India and the Colonies, the South African War, and concluding with a consideration of the problem of imperial federation,—this volume covers in a very thorough way a great Century and the life and influence of a great Nation therein. As a text-book it is unsurpassed. As a book to be read by a private, individual reader it is of thrilling interest.

COMMUNITY CIVICS. By Grace A. Turkington. Ginn and Company.

We have examined with interest a considerable number of books upon this subject; none have seemed superior to this one in comprehensive grasp of the subject and suggestiveness of method. We believe that Civics is one of the most necessary and interesting subjects in the curriculum. It concerns the environment of every pupil and leads him to investigate his surroundings and to compare them with those of others. It stimulates his ambition to make his town or city or state better, to clean up his neighborhood, to get on the right side of public measures. It is a study which makes him conscious that he counts for something and has something to do that is worth while. It is sometimes hard for a child to see the value of grammar, or literature, or mathematics; but to know about his own town or state, and to do something which will make it better, this calls out a response that makes study and investigation attractive. The aim of the author of this book is to help each pupil "to live the life that will advance the welfare of the nation."

BIRDS. THEIR PHOTOGRAPHS AND HOME LIFE. By A. H. Cordier, M.D. 145 illustrations from photographs of wild birds by the Author. Dorrance & Company, Philadelphia, publishers. Price $4.00.

Bird lovers—and we are glad to say that they are a multitude—will be delighted with this admirable addition to bird literature. The author makes no claim of attempting to cover the whole subject. He simply gives a delightful account of the "behavior and personalities" of the birds he has seen and studied in their native haunts. He has watched them and photographed them,—not killed them. He has admired their beauty, discovered their intelligence, cultivated their friendship where possible, and recorded his experiences in a way to stimulate others to make similar observations and to still farther broaden and deepen our knowledge of the life and experiences of our feathered friends. This book would make a very choice and interesting birthday gift to a boy or girl approaching or in their "teens." Its perusal would be likely to open up a new vision of the wonder and charm of Nature, which would make the coming years richer and more beautiful.

LONGMANS' HISTORICAL PICTURES. Longmans, Green and Co.

Twelve separate pictures in a set. The Roman Period, Richard Coeur de Leon's Sight of Jerusalem, The Armada in the Channel, Trafalgar, Portsmouth Harbor in 1909 (The Dreadnought), etc. These pictures are in color, 24 by 18 inches, on plate paper, 30 by 25 inches. Very interesting and helpful to the imagination of pupils studying history. Price only 50 cents for the set.

JUNIOR HIGH SCHOOL MATHEMATICS. By Walter W. Hart. D. C. Heath & Co.

This book is the minimum course mentioned above in the review of Wells and Hart's Modern High School Algebra, and its material is taken almost entirely from the latter.—Review by Robert R. Goff.

We acknowledge the receipt of the following excellent books, for elaborate reviews of which we are finding it impossible to spare space in EDUCATION:

IN THE NORTH WOODS OF MAINE. The Story of a Winter in the Wilderness, Fifty Years Ago. By E. E. Thomas. Illustrations by H. B. Dummer. World Book Company.

REPORT OF THE LIBRARIAN OF CONGRESS. For the Fiscal Year ending June 30, 1923. Government Printing Office, Washington, D. C.

SHEET METAL WORK. M. S. Trew and V. A. Bird. Drawings by Robert H. Barnes. The Manual Arts Press. Price 85 cents.

THE LIVING GOD. By "What Matters Who Wrote It!" G. P. Putnam's Sons. A book of 86 pages. 1st Division, "Life"; 2nd, "Man"; 3rd, "God."

HOW ARE WE CLOTHED. A Geographical Reader. By James Franklin Chamberlain, Ed.B., S.B. This book belongs to Macmillan's Home and World Series.

A DROP OF WATER. By Margaret Horner Clyde. The Chemical Publishing Company, Easton, Pa.

TEENIE WEENIE LAND. By William Donahey and Effie E. Baker. Illustrated by William Donahey. The Beckley-Cardy Company.

CHEERFUL CHILDREN. By Edmund Vance Cooke. Illustrated by Mae Herrick Scannell. The Beckley-Cardy Company.

SUMMER CAMPS FOR BOYS AND GIRLS. By Henry Wellington Wack, F.R.G.S., Associate Director, Camp Department, The Red Book Magazine, 33 West 42nd St., New York, N. Y.

GETTING INTO YOUR LIFE WORK. A Guide to the Choice and Pursuit of a Vocation. By Herald M. Doxsee, Teacher of Social Sciences in J. Sterling Morton High School, Chicago. The Abingdon Press, New York and Cincinnati. An excellent little book for any young man or woman, on a subject which is of vast importance. The volume is written in a sympathetic way, by a teacher of wide experience in advising young people about life's multitudinous problems.